

WEDNESDAY, SEPTEMBER 29TH, 1880.

The Vice-President, W. J. Stephens, Esq., M.A., in the Chair.

MEMBER ELECTED.

Dr. Gordon of Murrurundi.

DONATIONS.

Eight Annual Report of the Zoological Society of Philadelphia.
 Verhandlungen Zool-Botanischen Gesellschaft in Wein, 1879.
 Journal of the Royal Microscopical Society, London, Vol. III.,
 No. 1 and 4.

Bulletin of the Museum of Comparative Zoology, Harvard
 College, Massachusetts, Vol VI., No. 3.

Journal of Conchology, Vol. III., No. 3.

PAPERS READ.

ON A NEW SPECIES OF DIASERIS.

BY THE REV. J. E. TENISON-WOODS, F.G.S., F.L.S., PRES.
 LINN. SOC. N.S.W.

Amongst some corals recently dredged at Port Denison by Messrs. Haswell and Morton there is one new species of a very interesting character. It belongs to the section *Madreporaria aporosa*, family *Fongidae*, second sub-family *Lophoserinae*. Amongst the simple and free corals of this division there is one with bare and lobed walls which Messrs. M.-Edwards and Haime experienced much difficulty in assigning to any position because of the incomplete character of the calice. A new genus was erected for it, placed as above, removing it from the genus *Fungia* in which it had been included by Michelin (*Magasin de Zoologie*, Vol. V., 1843).

The genus is thus described :—“ *Diaseris*. Corallum simple, free, discoid, with a bare and costulate wall with a structure similar to *Cycloseris*, but in its young state it is formed of a certain number of separate petaliform lobes which in the more mature state become more or less united by their edges.” The authors add that in all the various families of corals no other instance of this structure is known. Two species were described by them, *Diaseris distorta*, Michelin, of unknown habitat and *D. Freycineti*. Both were large, viz., 50 millimetres across and 10 high, and the differences between the species were that *D. Freycineti* was a coral with closer septa which were not so high as *D. distorta*. See Hist. Nat. des Corallaires, Vol. III., p. 54. Also Comptes Rendus de l'Academie des Sc., Vol. XXIX., 1849, p. 72.

The species to which I have now to call attention is very much smaller than either of the preceding and there are also peculiarities in the septa as I shall proceed to show.

DIASERIS MORTONI, *n. s.*, Plate XV., fig. 1, 2.

Corallum semicircular, thin, subdiscoid, divided into two, three or four lobes in some specimens, though the majority are completely semicircular with an entire rounded edge. Base flat or concave in the slightest degree, showing no trace of any former separation between the lobes. Costa distinct, fine, granular and corresponding with the septa, but all equal in thickness and taking their origin from the edge at distances the same at the various orders; the outer edge of the septa projecting like the teeth of a fine cog-wheel outside the base. In nearly all the specimens these were four distinct systems, though some had only three, two, and some with only one and the rudiments of two others. The cycles depended on the age of the specimens. They ranged from five to eight incomplete. All are granular, but the granules are in ridges so as to give rise to a vermicular surface and the ridges project at exactly opposite sides of the septa; the

synapticulæ are few and quite at the base. The primaries are quite free with a conspicuous thickening at their origin; the secondaries are also free with a slight thickening, and both have a rounded crenulate margin. All the other orders gradually branch out or divaricate from one another with a gradual curve. They are very incompletely formed so as to be deeply divided into irregular paliform lobes. The height to which the septa rise is also dependant on their age, the first being much higher than the rest and sloping gradually from the margin upwards towards the central fossa and so on proportionately for all the cycles. All except the central septum curve towards the outer margin so as to preserve a flabellate form. In the fossa there are a few papillæ of a columella.

There can be no doubt that this form of coral is a form of *Cycloseris*, in which some of the systems are aborted. In this view there is nothing to distinguish the present species from *C. cyclolites*, except the size. I do not say that this is the true nature of the organism, but a close attention to the young stages will reveal the whole matter. It will be observed that one strong point in favour of the explanation which is suggested for this abnormal coral is the variation in the number of systems which are aborted. In many instances all are gone but one. In this case however, we have a semicircular fringe of septa round the fossa which represents all the other systems. Another fact is the occurrence of one or two specimens in which only one system is aborted. In this case the coral is to all intents and purposes a very small and depressed *C. cyclolites* minus one system.

About sixty specimens were dredged up off Holborn Island. They are of various sizes and seem to indicate some disadvantageous circumstances in their growth by which they have been stunted. Some of the specimens were much eroded and full of small grains of sand, foraminifera, &c. I have dedicated the species provisionally to Mr. Alexander Morton.

DESCRIPTION OF TWO NEW SPECIES OF AUSTRALIAN FISHES.

BY E. P. RAMSAY, F.L.S., &c.

SOLEA MACLEAYANA, *sp. nov.*

D. 64-66. A. 50. C. 18. V. 5.

The height of the body is twice and one-seventh in the total length without the caudal fin; the length of the head is one-sixth of the total length, and about five times and one-fourth in the total without the caudal; no pectoral fins; the right ventral joined to the anal; a small tubular nostril on the coloured side; eyes on the right side, the upper slightly in advance of the lower, both small, the distance between them slightly greater than their diameter; the dorsal commences on the snout, the anterior rays small, simple, some on the back and posterior portion forked, no scales on the rays. Scales on the body ctenoid, with eight to ten spines, about eleven rows of scales from the eye to the cross line, along the lateral line; from thence 110 to 116 rows along the lateral line on to the tail; lateral line straight.

Colour light brown, crossed by narrow dark brown irregular narrow bands about as wide as the interspaces, extending on to the fins, some of the bands forked, about thirty-five or more on the body and head, four or five on the caudal fin.

A rather small plump species. A number were taken in the net at Manly Beach, September 11th, 1880, with *Solea microcephala*. I have dedicated this very distinct species to my esteemed friend the Hon. Wm. Macleay, F.L.S., &c.

LOTELLA GRANDIS, *sp. nov.*

B. 7. D. 9/52-54. A. 58.

The first two rays of the ventral fins produced, the second the longest, reaching to the vertical from behind the base of the pectoral; pectoral fin triangular, tapering; first dorsal separate, of nine spines. The mouth oblique, snout slightly turned up, lower part of forehead concave, the maxillary reaches one-third

of the diameter of the eye behind the eye, the diameter of the orbit is five times in the length of the head; the height of the body at the commencement of the second dorsal is nearly equal to the length of the head, and is thrice and three-fourths in the length of the body, without the caudal fin. Snout once and a-third the diameter of the eye. Head thrice and two-thirds in the length without caudal, the barbel on the chin equal in length to the short diameter of the eye, less than the long; the width of the inter-orbital space equal to the snout. Vent opposite the fourth ray of the second dorsal. Nostrils close together. Teeth in viliform bands in the jaws, uniform, no larger series. The depth of the head is more than one-fifth greater than its width; the anterior dorsal fin commences behind the root of the pectoral; the length of the pectoral exceeds the distance from the posterior margin of the orbit to the upper angle of the gill covers. The ventral is inserted the length of the pectoral from its base, and is a little longer than the pectoral fin.

General colour reddish brown or light cinnamon, eye bright yellow; the pectoral fins orange; lips, gills, chin, and ventral fins orange-yellow; the anal, dorsal, and caudal fins reddish-brown with a distinct black margin.

Hab. Wollongong.

SPECIES OF EUCALYPTUS IN THE COUNTY OF CUMBERLAND: THEIR
HABITAT AND USES.

BY THE REV. DR. WOOLLS, D.D., F.L.S., &c.

Part III.

Section III. RHYTIPHLOLE.

1. *E. acmenoides*, (Schau.) or the "White Mahogany," is a species which Mr. Bentham has united with *E. pilularis*, or the "Blackbutt." Baron Mueller (Decade 3.) speaks of it somewhat doubtfully as a distinct species, but I think that further inquiry